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ABSTRACT

Significant developments have occurred in the field of professional development (PD) in Australia's vocational education and training (VET) sector in the past 10 years. During the early 1990s, work-based learning (WBL) became the preferred model for PD in the VET sector. Research sponsored by the National Staff Development Committee of the Australian National Training Authority in 1993 identified action learning as an appropriate methodology for structuring national VET sector PD programs. Later research focused on issues such as linking PD programs to national VET policy goals, adopting learner-centered PD approaches, and transforming evaluations of PD programs from efforts designed to satisfy funding requirements to foundations for program improvement. Advocates for basing VET PD programs on WBL based their arguments on the findings of research on adult education, lifelong learning, and learning organizations. A review of the research provides the beginnings of a more detailed descriptive framework for evaluating and researching in the field of PD. The framework draws together theoretical perspectives on andragogy, learning organizations, and theories of critical social science that inform the methodologies of action learning and action research. (Definitions of key terms related to the theoretical foundations of WBL are appended. The bibliography contains 57 references.) (MN)

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Work-based learning in the contemporary Australian VET sector: a re-appraisal

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This paper takes the opportunity to reflect on developments over the past ten years in the field of professional development in the vocational education and training (VET) sector of Australia, and to identify the supporting theoretical arguments for the shape that these developments have taken. From this analysis, an integrated image of work-based learning (WBL) as a model of professional development is projected.

Key developments in VET sector professional development: 1990s

During the first half of the 1990s, WBL became the preferred model for staff development in the VET sector.

The impetus for this development was the publication of a discussion paper on WBL by Carter and Gribble (1991) for the Technical and Further Education (TAFE) National Staff Development Committee (TNSDC). The model for WBL espoused by Carter and Gribble was trialled by TNSDC in a national WBL project resulting in a report titled: *Work based learning, implications and case studies* (TNSDC 1992).

By the end of 1992, a critical issue for the National Staff Development Committee of the Australian National Training Authority (ANTA) (NSDC) was how to assess the potential for WBL, as a national staff development initiative, to act as a 'catalyst for behavioural, attitudinal and organisational workplace change within the national VET sector' (NSDC 1995, p 2). The approach taken by NSDC to this issue was to define WBL in practice through an explicit and well-known staff development process - action learning. In 1993, NSDC commissioned a research study to 'explore the potential of action learning as an additional means to support the development of staff involved in national training reform' (NSDC 1995, p 2).

Based on the positive findings of this research study, the NSDC agreed that action learning was an appropriate methodology for the structuring of national VET sector staff development programs. The outcome of this decision was the establishment of a national staff development 'CBT in Action Scheme' in mid-1993, within which action learning became the work-based model of learning. This staff development program, along with several others, was supported by the NSDC through to 1996.

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In 1995, the NSDC revisited WBL as it had been defined and supported through the 'CBT in Action Scheme'. A discussion paper was released in June of that year entitled 'Work-based learning: a model for national staff development'. This paper crystallised the rationale of NSDC for supporting WBL as the preferred model for its national staff development programs.

The 1995 NSDC rationale for WBL was a continuation of the Carter and Gribble (1991) argument that staff development models for the VET sector should reflect the changes that are being promoted more broadly in Australian businesses to meet the challenges of the post-industrial economy. The 1995 NSDC discussion paper asserted that its staff development framework must be consistent with both the training demands of an increasingly complex public and private organisational context and the national training policy of ANTA.

Put directly, the argument ran as follows:

- ANTA's national training policies have been informed by industry and business interests and therefore reflect the training needs and demands of industries and enterprises facing the workforce and organisational challenges of the emerging post-industrial economy in Australia and globally;

- workplace training is a consistent demand placed on training providers in the NVETS by employers seeking the most effective way of meeting their workforce training needs, and is therefore a key component of ANTA policy;

- NVETS' staff development programs must therefore focus on learning strategies that provide structure and flexibility to the delivery of workplace training in order to achieve outcomes required by clients;

- NVETS staff development programs with an emphasis on workplace training delivery also need to promote the necessary behavioural, attitudinal and organisational workplace change (cultural change) to NVETS' training provider institutions, so that the delivery of training in business and industrial workplaces becomes understood and acceptable as routine practice by training staff;

- an effective approach for achieving these twin goals of workplace training capability and associated supportive culture within training provider organisations is to provide the opportunity for training provider staff to experience structured workplace training/learning themselves.

Interestingly, the 1995 NSDC discussion paper developed the argument for its preferred VET practitioner staff development framework by proxy. The logic seems to be that if a case can be made for a particular set of staff development strategies for enterprises of the Australian post-microeconomic reform and post-industrial period, then the same case applies, according to the argument unpacked above, to the VET sector.

While still promoting the WBL model as the staff development framework for the VET sector, NSDC was proposing for the 1996-1998 period to expand the learning

strategy options available through its programs from its 1993-1995 emphasis on action learning.

ANTA intervened in late 1996 by contracting NCVER to conduct new research into professional development for the VET sector. NCVER commissioned five projects, the reports of which were published together in 1997 as *Research Reports into Professional Development* (Mather et al 1997).

The following were key themes from these reports:

- Professional development programs are more effective when linked to national VET policy goals and organisational change.

- As examples of learner-centred professional development approaches that have a greater impact on organisational change and participant staff development, successful professional development methodologies include work-based and self-paced learning with action learning.

- Professional development programs need to include, in addition to front-line VET practitioners, professional development project coordinators and facilitators and managers of training organisations.

- Evaluations of professional development programs need to move beyond those designed to mainly satisfy funding requirements to become the basis of program improvement.

Mather et al (1997) have identified learner-centred approaches amongst the innovative methodologies in VET sector professional development. 'Learner-centred methodologies that allowed flexibility, a mix of experience/practice/theory/ reflection, and structured contact with other learners, had a much greater long-term impact on attitudes and behaviours' (Ward 1998, p 14). Strong support was noted for action learning and mentoring.

WBL, as a conceptual device in the discourse of professional development in the national VET sector, gained in strength from these NCVER-commissioned research reports. It is thus no surprise that WBL then became the major structuring framework of ANTA's two key national staff development projects from 1997; *Framing the future* (FTF) and *LearnScope*.

WBL and action learning came together explicitly as integrated components of a VET sector staff development model with the establishment of the FTF project in 1997. Planning for FTF began in 1996, and in May 1997 ANTA contracted a project team from the Para Institute of TAFE (South Australia) to manage this national staff development initiative.

Field (1999, p 2), in his evaluation report of FTF, commented that the FTF project team had developed this staff development program in a way that mirrored 'the kinds of characteristics the VET system in Australia is seeking – for example, being empowering for participants, user driven and flexible'.

Through the funding of individual WBL projects, FTF supported the staff development needs of people in the VET sector who are involved with the implementation of the National Training Framework (NTF). These projects typically involved small groups of people dealing with an idea or issue within a work team identified by the organisation as needing to be resolved. These projects had management support for the work being undertaken, industry/enterprise involvement and a project facilitator (ANTA 2000).

The central project team of FTF defined its work in terms of a challenge to develop a model of staff development that would:

- promote the use of workbased learning as a means of moving beyond awareness to practical application;
- help VET staff to keep up to date with emerging changes within the VET system; and
- be demand driven, relevant, flexible, cost effective and timely (ANTA 1998).

This challenge was tackled through a model of staff development that encouraged VET practitioners to take responsibility for their own learning to meet their individual needs. The model made use of a number of learning strategies – action learning, technology-based learning, and sharing and reflection among groups of practitioners. FTF attempted, through its model, to support staff development experiences that were real and connected directly with the work of training staff and management. In this way, FTF projects were designed to assist VET sector personnel tackle real work problems and challenges with increased knowledge and understanding.

The advantages claimed by FTF (ANTA 1998) for its particular adaptation of WBL were that its staff development model:

- was *flexible*, as people chose the level and scope of staff development they needed; there were few constraints on how, when and where they learn.
- was *empowering*, as it moved VET practitioners beyond simply gathering facts about the new system to the development and application of skills and knowledge as it affected them.
- had the potential to be *self-sustaining*, as it facilitated the development of a workbased learning culture.

Clearly, FTF emerged from the 1990s as a proponent of WBL informed by the initiatives introduced by ANTA into the evolution of its national framework for staff development within the VET sector, beginning in 1991 with the Carter and Gribble discussion paper for the TNSDC and flowing through the NSDC staff and management development programs from 1992 to 1996. The FTF Program is a grand daughter of this WBL speciation process, and is now perhaps poised for a further metamorphosis into yet new but related forms of staff development.

Theoretical foundations of WBL

Advocates of WBL in the 1990s (eg Marsick and Watkins 1990; Mumford 1997) refer for support for this approach to professional development to two main domains of research and debate; that related to the development of theoretical perspectives relevant to adult education and learning, and that associated with the transformation of organisations into so-called 'learning organisations'. Where WBL approaches to professional development tend to be presented to the VET sector through more technical and procedurally styled documents, often the appeal of these accounts to the VET practitioner audiences is through their implicit connectedness to previously accepted concepts of adult education and organisational change processes.

Accordingly at this point, we undertake a brief review of the theoretical foundations of the contemporary discourse surrounding WBL drawn from literature on adult education and learning organisations.

Adult education

Zuber-Skerritt (1992, p 54) claimed that the principles of adult learning 'led to a revitalisation of action learning' in the field of professional development. She reached this conclusion after reviewing theories of knowing and learning as relevant to professional development. Of relevance is Zuber-Skerritt's foregrounding of holistic theories of knowing and learning. Holistic theories are defined as those that 'do not consider parts of the learner's system (eg. behaviour, memory, speech acts, etc.) but the phenomena of learning in the person as a whole; they describe the phenomena as they appear in the person's consciousness' (1992, p 44).

Holistic theories of knowing and learning, according to Kolb (1984, p 21), encourage 'integrative perspectives on learning that combine experience, perception, cognition and behaviour (action)'. This is because learning is perceived as a dialectical process that integrates experience and concepts, observation and action in real and problematic situations. This dialectical conception of learning (and education) is a common theme linking these various examples of holistic learning theories.

Through dialectical thinking, development of social-political perceptions and awareness could be acknowledged and incorporated into holistic theorising about adult learning. Kolb (1984) has referred to the socio-emotional development throughout a person's life cycle, and Zuber-Skerritt (1992), in her commentary on Kolb, has noted the contribution of the radical education movement as represented by Illich (1972) and Freire (1972) to experiential learning theory. This construction of the process of dialectical thinking within a holistic orientation to adult learning is the antithesis of learning associated with static and deterministic thinking. Dialetical thinking within a model of experiential learning is, in essence, thinking within processes of social and organisational change.

In Kolb's theory of experiential learning, dialectical thinking is incorporated as central to the process of creating new knowledge through the transformation of experiential learning (1984, p 38). This is clearly represented in his six propositions of adult experiential learning:

1. Learning is best conceived as a process, not in terms of outcomes;

2. Learning is a continuous process grounded in experience;
3. The process of learning requires the resolution of conflicts between dialectically opposed modes of adaptation to the world;
4. Learning is a holistic process of adaptation to the world;
5. Learning involves transactions between the person and the environment; and
6. Learning is the process of creating knowledge. (Kolb 1984, pp 25-38)

The emphasis on life experiences of adult learners by Knowles (1985) as being a rich resource for self-directed, problem solving groups, and Candy's (1991) reference to constructivism in his analysis of lifelong learning and the way adults create personal constructs in order to give meaning to their world of experiences, also connect to holistic theories of knowing and learning with their cyclical processes linking experiences to informed action and expanded understanding.

Mumford (1990) developed his own version of the experiential learning cycle with full acknowledgement to Knowles (1985, 1986), Kolb (1984) and Lewin (1948). Mumford (1997) overlaid his four-staged learning cycle (experiencing, reviewing, concluding and planning) onto Revans' (1982) work on action learning.

His revised action learning - 'learning equation' - enabled Mumford (1997) to emphasise the iterative nature of action learning by initially associating Revan's 'Questioning Insight' with the reviewing stage of his learning cycle. This was intended to lead members of an action learning set to the other three stages of his learning cycle before reviewing the experience of their planned new action as the start of the next learning cycle.

> The Action Learning process is potentially extremely rich because it provides scope for consistently going around the Learning Cycle and discovering more about yourself, more about the process, more about how to transfer particular experiences to other situations.
> (Mumford 1997, p 12)

What emerges from this short exploration of the learning theories informing the discourse on adult learning is a direct discursive connection to WBL in the form of action learning.

Learning organisations

The substantial literature on learning organisations provides a further theoretical and discursive foundation to the contemporary construction of WBL in the VET sector. Although the notion of a learning organisation can be a somewhat ambiguous concept (Poell et al 2000), it is structured by the recurring theme of learning facilitation at individual, team and organisational levels linked to the argument that teams are crucial contexts in post-industrial enterprises for the organisation of both work and learning (Dixon 1994; Senge 1990).

Also of interest is the tension in the learning organisation literature over the positioning of individual and collective learning. For example, Duignan (1995, p 7) recognises learning as 'essentially an individual phenomenon', and then argues for particular forms of learning programs that are conducive to the transformative agenda of organisations. 'Learning programs ... in organisations are unlikely to succeed if they fail to consider the complexities of organisational life .... While

individuals and groups can be provided with learning opportunities, the challenge is to transform this learning into organisational learning' (Duignan 1995, p 8). Mabey et al (1998) and Smith (1998) would respond to this challenge by positioning staff development within a strategic human resource model where individual staff learning is closely linked to organisational objectives.

Meeting this challenge requires, in the first instance, an understanding of the complexities of adult learning in an organisational context; the context of the workplace. The key researchers addressing this challenge include Aygyris (1990, 1993); Boud (1997); Boud et al (1985); Garrick (1998); Kolb (1984); Marsick (1987); Marsick and Watkins (1990); Mezirow (1981, 1990) and Schon (1983, 1987). The work of these researchers focuses on learning within organisations as workplaces, as distinct from learning that occurs within formal educational institutions. The implications of this body of research work on organisational transformation are that individual workbased learning can, under certain conditions, lead to organisational learning and transformative change.

These certain conditions are those that promote the individual learning beyond what Mezirow (1981) identified as instrumental learning and onto dialogic and self-reflective learning. Dialogic learning occurs when people work and learn together in teams, for example. Learning in this dialogic domain is expected to expand as individual learning is transferred into collaborative and social organisational learning activities. Self-reflective learning is transformative learning as it involves individuals critically reflecting on their identity as staff and on their contribution to the social group within their organisation. According to Mezirow (1981), critical reflectivity leads to 'empowerment' of workers in an organisation. Associated ideas are those, for example, of Schon (1983) ('reflection-on-action'), Knowles (1980) ('self-direction') and Argyris (1993) ('double-loop learning').

Another strand of theorising linking individual adult learning to organisational learning is represented by the work of Billett (1993, 1994), Brown et al (1989), Lave and Wenger (1991), Vygotsky (1978) and Wenger and Snyder (2000). These researchers argued that organisations, and the workplaces within them, construct contexts for individual and team learning that are sociocultural in nature. These sociocultural contexts for learning are 'communities of practice' (Wenger and Synder 1998, 2000; Young 2000) which define the scope for individual activity, in the sense of authentic tasks.

Within communities of practice, workplace learners are able to assimilate the culture, values and ethos of their organisations (Brooker and Butler 1997; Fuller 1996). Successful communities of practice, however, are those that are able to transform themselves by the learning synergies latent within any sociocultural entity. The key to transformation is the characteristics of the communication networks within a community of practice (Billett and Rose 1996; Cunningham 1998; Pea 1993), eg quality communication between participants forming a WBL network within a community of practice would be an explicit professional development strategy directed towards meaning appropriation, identifying and understanding relevant knowledge, and testing that knowledge in new and changing circumstances.

This research literature on learning organisations provides the underpinning theoretical and discursive arguments in support of WBL. WBL, in the form of action

learning (Mumford 1995; Passfield 1996) and action research (Clark 1989; Huse and Cummings 1985; McLennan 1989), emerges as a methodology through which transformative adult learning can lead to an organisation being able to 'continuously challenge and transform (its) own concept of identity' (Limmerick et al 1992, p 8). Passfield (1996, p 38) has argued that this capacity for organisational 'self-transcendence' (Jantsch and Waddington 1976, p 9) is a feature of an 'action-learning organisation'. This conflation of action learning by Jantsch and Waddington, as a form of WBL, with the concept of a learning organisation under the rubric of 'capacity building for self transcendence', clearly connects the research on learning organisations with the dominant contemporary conceptualisations and constructions of WBL, as a programmatic model for professional development in the national VET sector of Australia.

An integrated image of WBL

This review of WBL provides the beginnings of a more detailed descriptive framework for evaluating and researching in the field of professional development. This framework draws together theoretical perspectives from:

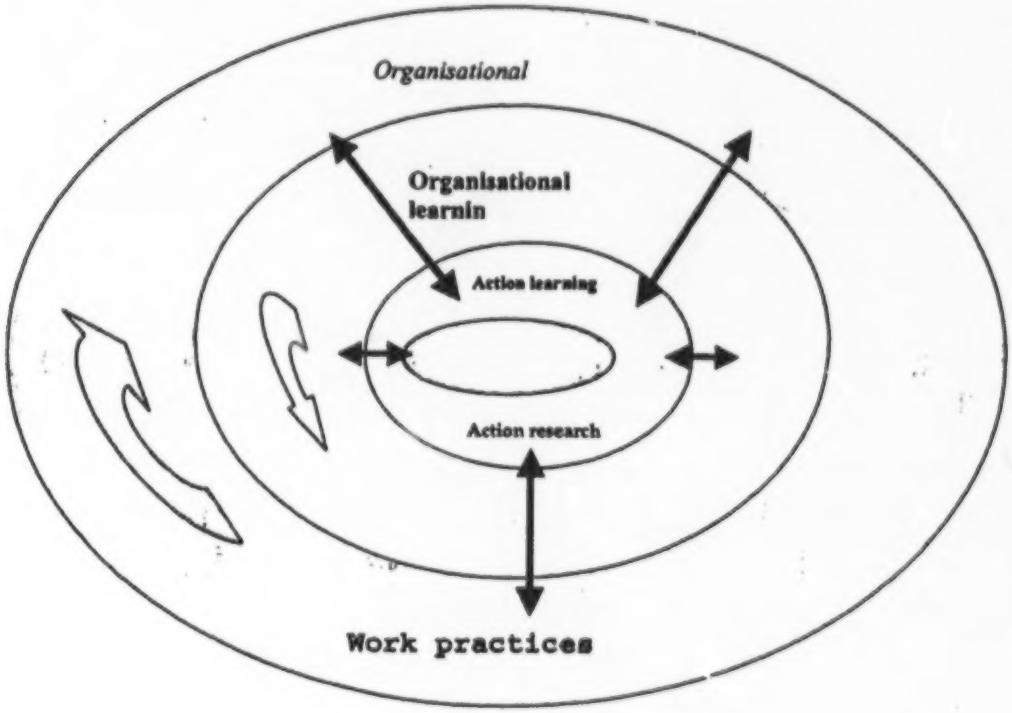
- adult education and learning (andragogy); and
- learning organisations.

Also included in this emerging framework are the more general theories of critical social science that inform the methodologies of action learning and action research. The framework builds from the interconnecting core ideas within these theoretical perspectives. This connectedness can be represented across registers of learning and working activity of an organisation as in Figure 1 below.

Adult learning theory has been centred in this representation of the components of a potential theoretical framework for describing and analysing professional development programs. Adult learning theory informs WBL programs through action learning/research. These methodologies promote individual and group learning within an organisation and thereby initiate changes to the learning and working domains of the organisation. These domains of learning and working, while loosely coupled, are linked by the shared work and learning experiences of the same individuals constituting the organisation as a community of practice.

As a developing construct, integrating compatible ideas from adult learning, learning organisations and action learning/research, this representation facilitates new ways of thinking about WBL as a professional development model. This representation, given its grounding in the research literature briefly traced in this paper, locates WBL as an appropriate and relevant approach to professional development in contemporary times.

Figure 1: Representation of the interconnectedness of and dynamics between andragogically-informed WBL (action learning/research) and the learning and working domains within an organisation



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Appendix - Theoretical foundations of WBL: core ideas

Andragogy

Adult learning theories foreground the following learning program features as key components for adult learner engagement:

- the program is experience-based and experiential
- the program facilitates learner-directedness, learner-centredness and learner self-determination
- the program activities are relevant with immediacy of application; they are action oriented
- the program encourages adaptive behaviours through transactions between the learner and his/her environment
- the program promotes dialectical thinking and holistic learning processes through iterative problem solving and the resolution of contradictions.

Learning organisations

A learning organisation is recognised as creating an internal environment which values:

- a sociocultural climate that facilitates individual, team and organisational learning
- the development of problem-solving capacities in employees
- individual empowerment, self-direction, independent decision-making and autonomy coupled with critical thinking and reflection
- positive worker dispositions towards flexibility, innovation, adaptability and commitment to organisational goals
- achievement of required employee capacities through strategic/emancipatory models of staff development with an emphasis on WBL
- an organisational capacity for continuous improvement and, when necessary, transformational change.

Action learning and action research

Action learning and action research are theoretically supported (from theories informing holistic learning programs and critical social science discourse) methodologies for structuring collaborative problem-oriented professional development.

The relevant characteristics of action learning/research are that both:

- are workbased.

- are iterative through experientially based cycles involving practice (work) action theories of individuals and teams, plus learning and newly created knowledge (theories) expressed through innovative practice. They are

therefore praxis focused.

- value critical self and group reflection by practitioners informed by and informing strategic new social action steps undertaken by the same practitioners attempting to resolve identified contradictions experienced in their workplaces.

- seek to change social circumstances (including institutional/organisational) by transforming participant understandings of these circumstances as they struggle to resolve problematic contradictions experienced in their social (work) setting.

- claim to liberate social actors (employees and managers), through collaborative action-based reflection, from routinised and habitual ways of thinking about themselves and their scope and capacity to act in and on their social world. In this sense, they claim to be potentially self-transcendent, emancipatory and socially (institutionally) transforming.

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